

THE OCCURRENCE OF AN INTERSEX INDIVIDUAL OF *PSYCHOMYIA FLAVIDA* (TRICHOPTERA)¹

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ABSTRACT: The occurrence of an intersex specimen of *Psychomyia flavida* in a light trap collection is reported.

The occurrence of large numbers of females and few males of *Psychomyia flavida* in light trap collections is quite common; Anderson (1976), Leonard et al. (1949), Marshall (1939), Nimmo (1966), Sibley (1926). Corbet (1966) offers evidence that the species is parthenogenetic. At present 2 males and 3080 females have been identified in a UV light-trap collection from Linesville Creek, Crawford County, Pennsylvania, 41°41'N, 80°24'W.

An intersex specimen which is clearly a female with male characteristics is present in this collection (fig. 1). The tenth tergite of this specimen is pro-

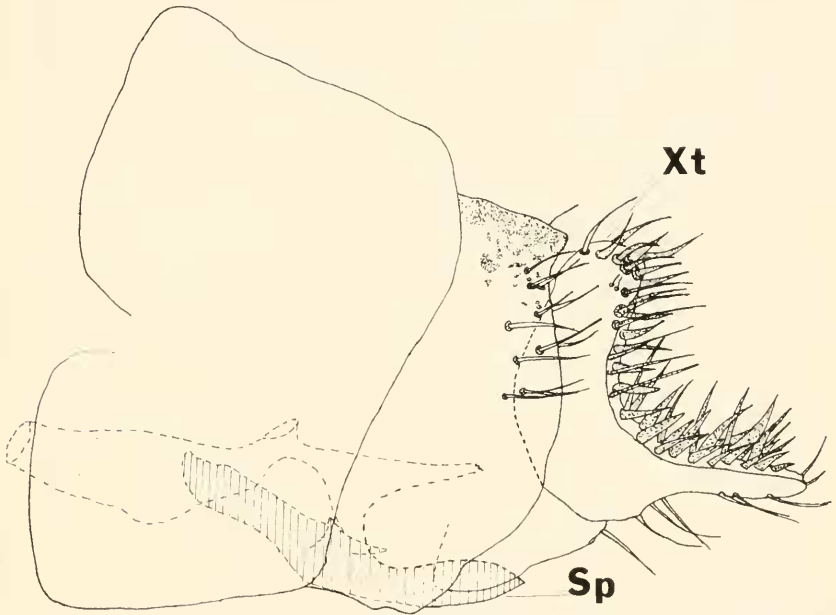


Fig. 1. *Psychomyia flavida* intersex specimen. Lateral view of genitalia. Sp, sternal plate characteristic of female; Xt, tenth tergite characteristic of male.

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duced into heavily spined flap-like appendages as in a male; however, they appear somewhat underdeveloped and are not as robust nor of the same shape as in a typical male (see Ross 1944). Neither cerci nor claspers are present, but within the abdomen are several sclerotized structures which may be rudimentary male reproductive parts. The homologies of these structures are uncertain and they are not included in the figure. The ventral plate of the female is present as is the bursa copulatrix. The specimen was gravid.

This is the first report of intersexuality in the Order Trichoptera.³

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³Dr. A. Nimmo has collected intersex specimens of the genus *Rhyacophila* from Alberta, Canada (personal communication). He also has informed me of a mention in the literature concerning this phenomenon in Trichoptera; however, the source is unknown.